

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed November 17, 2004. Reconsideration and allowance of the application and pending claims are respectfully requested.

I. Claim Rejections - 35 U.S.C. § 112, Second Paragraph

Claim 5 has been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

In response to the rejection, Applicant has amended claim 5 to remove the term "its". In view of this amendment, it is respectfully asserted that claim 5 defines the invention in the manner required by 35 U.S.C. § 112. Accordingly, Applicant respectfully requests that the rejection be withdrawn.

II. Claim Rejections - 35 U.S.C. § 102(e)

Claims 1, 3-7, 9-20, and 22-28 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Blumenau, et al. ("Blumenau," U.S. Pat. No. 6,665,714). Applicant respectfully traverses this rejection.

It is axiomatic that "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983). Therefore, every claimed feature of the claimed invention must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102(e).

In the present case, not every feature of the claimed invention is represented in the Blumenau reference. Applicant discusses the Blumenau reference and Applicant's claims in the following.

A. The Blumenau Disclosure

Blumenau discloses a method and apparatus for determining an identity of a network device. More particularly, Blumenau discloses a data management system for managing access to data. As is described by Blumenau:

The present invention is directed to a data management method and apparatus for managing accesses by multiple devices (e.g., host processors, file servers and the like) to data at a shared resource (e.g., a shared storage system). According to one embodiment, the shared resource selectively services requests from the devices for portions of data at the shared resource in response to configuration data associated with each of the portions of data at the resource.

In one embodiment, data at the shared resource is apportioned into volumes. Configuration data identifies which volumes of data are available for access by each of the devices coupled to the resource (e.g., over a network). The shared resource includes a filter that selectively forwards a request for servicing depending upon the identity of the device issuing the request and the configuration data associated with the volume to which access is sought. The filter forwards only those requests for volumes that the device has privileges to access. Requests to volumes for which the device does not have privileges are not serviced. (Blumenau, column 5, lines 13-31)

In view of the above, Blumenau describes a system that controls access to a data source from multiple devices. Significantly, the Blumenau is not used to identify or

convey the proximity of various devices on a network. Indeed, the term “proximity” does not even appear in the Blumenau disclosure.

B. Applicant’s Claims

As is noted above, Blumenau fails to teach several of Applicant’s claim limitations. Applicant discusses some of those claim limitations in the following.

1. Claims 1, and 3-6

Applicant’s claim 1 provides as follows (emphasis added):

1. A system comprising:
a device *proximity detector configured to determine, for each of one or more devices in a network, an inferred proximity of the device to the system* based at least in part on *information obtained from at least one network switch* as to which port of a network switch the system is coupled to and which port of the network switch the device is coupled to; and
a network interface, coupled to the device proximity detector, to allow the device proximity detector to communicate with the at least one network switch.

Claim 1 comprises limitations that are not taught by Blumenau. As an initial matter, Blumenau does not teach a “proximity detector” that is configured to determine an “inferred proximity” of a device to the system. As is noted above, Blumenau is not concerned with determining the proximity of devices at all. This is evident from, *inter alia*, the absence of the term “proximity” from the Blumenau disclosure. Instead, Blumenau is concerned with controlling access of multiple devices to data. Although Blumenau describes mapping of a network to determine which devices are connected to

the network using which ports, this simply does not equate to determining the proximity of the devices. In other words, although Blumenau's mapping permits a user to view the overall *connection* topology of Blumenau's storage system, that mapping does not indicate the proximity of the various devices. This is of course understandable given that proximity is simply not an issue when it comes to data storage. Specifically, unlike a situation in which the user must collect an output from a device (e.g., a printer), a user that is storing data typically does not care if the data is stored proximately (e.g., on a floor on which the user works) or remotely (e.g., on a different floor of a building in which the user works).

As a further matter, Applicant notes that Blumenau does not teach that the determination of the inferred proximity is based at least in part on "information obtained from at least one network switch". To the contrary, the information used to map the network topology in the Blumenau system is collected from the various devices that are connected to the system, not from any network switch. As is described by Blumenau:

Generally, *as each device enters the network it queries the network to identify the other devices coupled to the network. Each device that responds to the query returns one or more identifiers for the device.* For example, the identifier may include the world wide name (WWN) assigned to the device by the manufacturer of the adapter board using a naming convention. The identifier may also include a source identifier (ID). Both are unique identifiers for the device, however the source identifier is generally a shorter identifier than the WWN. *The source identifier may identify the device (e.g., a host processor) and the port of the device that is coupled to the network.* Thus, if multiple ports of the particular device are coupled to the network, an identifier may be returned for each port. When the

query operation is complete, each of the devices has knowledge of the other devices coupled in the network. Once each device has knowledge of the other devices in the network, this information can be used to exchange data between devices. (Blumenau, column 6, line 62 to column 7; line 12, emphasis added)

Accordingly, Blumenau teaches away from obtaining device connection information from a network switch.

In view of the above, claim 1 and its dependents are allowable over Blumenau.

2. Claims 7 and 9-19

Applicant's claim 7 provides as follows (emphasis added):

7. One or more computer readable media having stored thereon a plurality of instructions that, when executed by one or more processors, causes the one or more processors to perform acts comprising:

identifying one or more devices in a network;

obtaining, for at least one of one or more network switches in the network, an indication of which port of the network switch a computing device is coupled to;

obtaining, for each of the one or more identified devices and for the at least one network switch, an indication of which port of the network switch the identified device is coupled to; and

determining, for at least one of the one or more identified devices, how close the identified device is to the computing device, wherein the determining is based at least in part on the indication of which port of the network switch the computing device is coupled to and the indication of which ports of the network switch the one or more identified devices are coupled to.

As is noted above in relation to claim 1, Blumenau does not disclose making any determinations as to the proximity of a device on a network. It logically follows then that Blumenau does not teach “determining, for at least one of the one or more identified devices, how close the identified device is to the computing device”, as is required by claim 7. Claim 7 and its dependents are allowable over Blumenau for at least this reason.

3. Claims 20 and 22-28

Applicant’s claim 20 provides as follows (emphasis added):

20. A method, implemented in a computing device that is part of a network, the method comprising:

detecting one or more network switches in the network;

identifying one or more other devices of a particular type in the network;

obtaining, for each of the identified one or more other devices and for at least one of the one or more network switches, an indication of which port of the network switch the device is coupled to, *wherein the indication is obtained from at least one of the one or more network switches*; and

ranking, based at least in part on the obtained indications as well as which port of the network switch the computing device is coupled to, the one or more other devices in terms of their inferred proximity to the computing device.

Regarding claim 20, Blumenau does not teach obtaining an indication of which port of the network switch the device is coupled to “from at least one of the one or more network switches”. Moreover, Blumenau clearly does not teach “ranking . . . the one or more other devices in terms of their inferred proximity to the computing

device”. Applicant refers back to the discussion of claim 1. Claim 20 and its dependents are allowable over Blumenau for at least these reasons.

C. Conclusion

Due to the shortcomings of the Blumenau reference described in the foregoing, Applicant respectfully asserts that Blumenau does not anticipate Applicant’s claims. Therefore, Applicant respectfully requests that the rejection of these claims be withdrawn.

III. Claim Rejections - 35 U.S.C. § 103(a)

Claims 2, 8, and 21 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Blumenau in view of official notice. Applicant respectfully traverses this rejection.

As is identified above, Blumenau does not teach several of the explicit limitations contained in claims 1, 7, and 20. In view of that fact, Applicant respectfully submits that claims 2, 8, and 21 are allowable over the Blumenau for at least the same reasons that claims 1, 7, and 20 are allowable over Blumenau.

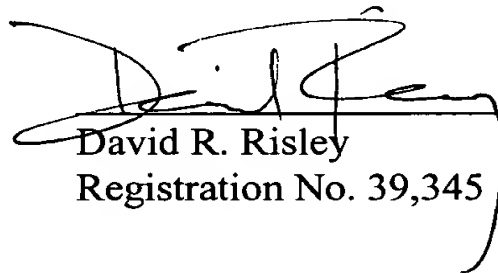
IV. New Claims

As identified above, claims 29-40 have been added into the application through this Response. Applicant respectfully submits that these new claims describe an invention novel and unobvious in view of the prior art of record and, therefore, respectfully requests that these claims be held to be allowable.

CONCLUSION

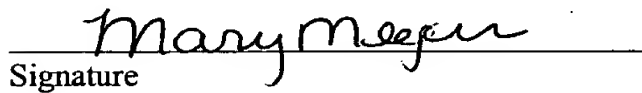
Applicant respectfully submits that Applicant's pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,


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